		Right radial compressed by grms.	Axilla temp.		Rate of pulse.	Rate of respiration.
			°	°		
(VIII.)	Before run ..	232	37,	98·8*	75	16
	After „ ..	116	37·6,	99·8*	110	
(IX.)	Before run ..	308	36·4		60	16
	After „ ..	500	36·8		102	
(X.)	Before run ..	540	36·6		72	
	After „ ..	164	37·2		132	
(XI.)	Before run ..	290	36·5		87	20
	After „ ..	190	37		120	
(XII.)	Before run ..	220	36·6		87	
	After „ ..	250	37·6		124	
		Left radial compressed by				
(XIII.)	Before run ..	165	36·7		60	
	After „ ..	275	37·2		108	

In all the tracings *a* indicates that taken before the run; *b*, *c*, *d* those after.

IV. "On a newly discovered extinct Mammal from Patagonia (*Homalodotherium Cunninghami*)." By William Henry Flower, F.R.S., Hunterian Professor of Comparative Anatomy, and Conservator of the Museum of the Royal College of Surgeons. Received May 30, 1873.

(Abstract.)

The author describes the complete adult dentition of a new genus of mammal, founded on remains discovered by Dr. Robert O. Cunningham in deposits of uncertain age on the banks of the River Gallegos, South Patagonia. The animal appears to have possessed the complete typical number of teeth, *i. e.* twenty-two above and below, arranged in an unbroken series, and of nearly even height, and presenting a remarkable gradual transition in characters, in both jaws, from the first incisor to the last molar. The molars more nearly resemble those of the genus *Rhinoceros* than any other known mammal; and, judging only by the general characters of the teeth, the animal would appear to have been a very generalized type of Perissodactyle Ungulate, allied through *Hyracodon* (a North-American Miocene form) to *Rhinoceros*, also more remotely to *Macrauchenia*, and, though still more remotely, to the aberrant *Nesodon* and *Toxodon*. The generic name *Homalodotherium* was suggested for this form by Professor Huxley in his Presidential Address to the Geological Society in 1870.

* Taken by another instrument in mouth.